

CLAIMS

1. A laser diode arrangement, comprising a joint electrically insulating substrate, a plurality of laser diodes arranged on said joint electrically insulated substrate; conductor structures provided on said substrate so that said laser diodes are connected with one another through said conductor structures; and means for joint control of said laser diodes.

2. A laser diode arrangement as defined in claim 1, wherein said substrate is composed of a material with a high thermal conduction coefficient and a good thermal coupling to said support.

3. A laser diode arrangement as defined in claim 1, wherein said support is formed as a cooling body.

4. A laser diode arrangement as defined in claim 1, wherein said support is in a thermal contact with a cooling body.

5. A laser diode arrangement as defined in claim 1, wherein the laser diode arrangement is formed as a pump module for optical communication.

6. A laser diode arrangement as defined in claim 1, wherein said laser diodes have first electrodes which directly contact said conductor structures and second electrodes which contact said conductor structures through first bond wires.

7. A laser diode arrangement as defined in claim 1; and further comprising further conductor structures applied on said support and contacting with said first-mentioned conductor structures on said substrate through second bond wires.

8. A laser diode arrangement as defined in claim 1; and further comprising short circuit bridges which provide low-ohmic bridging of poor or defective laser diodes.

9. A laser diode arrangement as defined in claim 1; and further comprising at least one reserve laser diode which is bridgable in a low-ohming way after an inlet test and can replace poor or defective laser diodes.

10. A laser diode arrangement as defined in claim 1; and further comprising a joint monitor diode for operation monitoring of several said laser diodes.

11. A laser diode arrangement as defined in claim 1; and further comprising a temperature regulating unit to maintain a wavelength change of said laser diodes over a temperature in a predetermined tolerance region.

12. A laser diode arrangement as defined in claim 1; and further comprising a source for controlling said laser diodes, said source being formed as a satellite supply voltage source.

13. A laser diode arrangement as defined in claim 1; and
further comprising a source for controlling said laser diodes which obtains
voltage from a satellite supply voltage.

TOP SECRET